

REMARKS-SUPPORT FOR AMENDED CLAIMS

Original Claims 1 through 11 have been cancelled and new Claims 12 through 30 replace the original claims.

New claim 12 is more specific than original claim 1 which is cancelled. Support for new claim 12 is found in Summary of Invention, page 5, lines 11 through 16, and in Preferred Embodiments, page 14, lines 3 through 19, page 16, lines 16 through 23, page 17, lines 1 through 22, page 18, lines 1 through 16 and lines 20 through 23, page 19, lines 1 through 7.

New claim 13 is more specific than original claim 5 which is cancelled. Support for new claim 13 is found in Summary of Invention on page 5, lines 14 through 19, and in Description of Drawings page 6, lines 1 through 22, page 7, lines 1 and 2, page 8, lines 1 through 22, and page 9, lines 1 through 6, and Preferred Embodiments page 14, lines 3 through 19.

New claim 14 is more specific than original claim 6 which is cancelled. Support for new claim 14 is located in Summary of Invention on page 5, lines 11 through 14 and in Description of Drawings, page 9, lines 10 through 23, page 10, lines 1 through 22, page 11, lines 1 through 22, page 12, lines 1 through 6 and in Preferred Embodiments page 16 lines 16 through 23, page 17, lines 1 through 22, page 18, lines 1 through 18.

New claim 15 is the article manufactured with new claim 12. Support for claim 15 is located in Summary of Invention page 5, lines 1 through 10 and in Description of Drawings, page 8, lines 14 through 22 and page 12, lines 5 through 17, and in Preferred Embodiments, page 13 lines 1 through 3, and lines 13 through 21, page 14, lines 1 and 2 and lines 20 through 23, page 15, lines 1 through 23, page 16, lines 1 through 4, page 18, lines 17 through 19.

New claim 16 is more specific than original claim 5 which is cancelled and is the article manufactured with new claim 13. Support for new claim 16 is located in Summary of Invention page 5, lines 7 through 9 and in Description of Drawings page 8, lines 14 through 22, and in Preferred Embodiments page 13, lines 18 through 21, page 14, lines 1 and 2.

New claim 17 is more specific than original claim 6 which is cancelled and is an article manufactured with new claim 14. Support for new claim 17 is found in Summary of Invention page 5, lines 9 and 10, and in Description of Drawings page 12 lines 5 through 11, and in Preferred Embodiments page 14, lines 20 through 23, page 15, lines 1 through 23, page 16, lines 1 through 4.

New claim 18 is more specific than original claim 6 which is cancelled and is an article manufactured with new claim 14. Support for new claim 18 is located in Summary of Invention page 5, lines 9 and 10, and in Description of Drawings page 12

lines 11 through 14, and in Preferred Embodiments page 14, lines 20 through 23, page 15, lines 8 through 23, page 16, lines 1 through 4.

New claim 19 is more specific than original claim 11 which is cancelled and is the article manufactured with the method of new claim 12 but without wire beads. Support for new claim 19 is found in Description of Drawings page 12, lines 15 through 17, and in Preferred Embodiments, page 18, lines 17 through 19.

New claim 20 is more specific than original claim 11 which is cancelled and is the article manufactured with the method of new claim 13 but without wire beads. Support for new claim 20 is found in Description of Drawings page 12, lines 15 through 17 and in Preferred Embodiments page 18, lines 17 through 19.

New claim 21 is more specific than original claim 11 which is cancelled and is the article manufactured with the method of new claim 14 but without wire beads. Support for new claim 21 is found in Description of Drawings page 12, lines 15 through 17, and in Preferred Embodiments page 18, lines 17 through 19.

New claim 22 is more specific than original claim 3 which is cancelled and is the apparatus used in the method of new claim 13. Support for new claim 22 is located in Description of Drawings page 6, lines 1 through 22, page 7, lines 1 through 22, page 8, lines 1 through 22, page 9, lines 1 through 6.

New claim 23 is more specific than original claim 3 which is cancelled and is the apparatus used in the method of new claim 14. Support for new claim 23 is located in Description of Drawings page 9, lines 7 through 23, page 10, lines 1 through 22, page 11, lines 1 through 22, page 12, lines 1 through 6 and in Preferred Embodiments page 16, lines 5 through 15.

New claim 24 is more specific than original claim 4 which is cancelled and is the article of claim 15 where the liquid elastomer is polyurethane. Support for new claim 24 is found in Preferred Embodiments page 13, lines 7 through 12.

New claim 25 is more specific than original claim 4 which is cancelled and is the article of claim 16 where the liquid elastomer is polyurethane. Support for new claim 25 is found in Preferred Embodiments page 13, lines 7 through 12.

New claim 26 is more specific than original claim 4 which is cancelled and is the article of claim 17 where the liquid elastomer is polyurethane. Support for new claim 26 is found in Preferred Embodiments page 13, lines 7 through 12.

New claim 27 is more specific than original claim 4 which is cancelled and is the article of claim 18 where the liquid elastomer is polyurethane. Support for new claim 27 is found in Preferred Embodiments page 13, lines 7 through 12.

New claim 28 is more specific than original claim 4 which is cancelled and is the article of claim 19 where the liquid elastomer is polyurethane. Support of new claim 28 is found in Preferred Embodiments page 13, lines 7 through 12.

New claim 29 is more specific than original claim 4 which is cancelled and is the article of claim 20 where the liquid elastomer is polyurethane. Support for new claim 29 is found in Preferred Embodiments page 13, lines 7 through 12.

New claim 30 is more specific than original claim 4 which is cancelled and is the article of claim 21 where the liquid elastomer is polyurethane. Support for new claim 30 is found in Preferred Embodiments page 12, lines 7 through 12.

REMARKS -CLAIM REJECTIONS

Steinke abandoned application 20020033220 titled "Air no air elastomer tire". Claim 1 describes a specific arch shaped tire cross section design which will carry a load with or without internal inflation pressure. The tire industry commercialized this type of tire on the 1994 Corvette. Only narrow geometric claims relating to arc are possibly new art.

Vannan 10/674 989 original claims 7, 8 and 9 regarding inflation pressure have been cancelled and no specific tire cross section geometry is required. All other Steinke claims are either directly or indirectly dependent on claim 1 and have very little description in the text or drawings of the specification.

Steinke claim 2 describes "mounting groove or slotfor mounting said tire casing on to said rim". Vannan 10/674 989 does not utilize any special tire - rim mounting technology.

Steinke claim 3 states "tire casing is closed across the lower end portions of the tire casing sidewalls". Vannan 10/674 989 does not mention closed torus technology.

Steinke claim 4 is a rim modification and Vannan 10/674 989 does not mention rim design.

Steinke claim 5 says "thickness of material increases proportionately with increases in anticipated load". Vannan 10/674 989 does not claim any tire thickness to load relationship.

Steinke claim 6 adds "a pair of like beads" which is not novel.

Steinke claim 7 adds "a first ply formed from a mesh material" but does not define the ply or how it is made or installed. Vannan 10/674 989 does define the ply and method for making it in extensive detail.

Steinke claim 8 adds "a mesh of fiberglass, a weave of graphic etcto extend around the tire casing" with very little description in the spec. These materials were commercialized years ago by the tire industry.

Steinke claim 9 describes the typical tire on the road today.

Steinke claim 10 adds "a second ply formed of a like material of the first ply". Most radial tires are two ply.

Steinke claim 11 is the same as most tires.

Steinke claim 12 is the same as most tires and has very little description in the body of the specification.

Steinke claim 13 is the same as most polyurethane tires.

Steinke claim 14 is the same as most tires.

Steinke claim 15 is the same as most polyurethane tires.

Vannan 4231410 according to the Abstract is "a method of forming a ply by injection molding a fluid material such as polyester or polyamide." Vannan 10/674 989 does not claim a molded ply but instead utilizes any traditional tire reinforcing textile or metallic cord or cable.

Vannan 4231410 claims "a wheel-tire assembly" in claim 1 which is not part of Vannan 10/674 989. Vannan 4231410 also claims "a pre-shaped plastic reinforcing member" which is a molded thermoplastic ply and Vannan 10/674 989 does not utilize or claim molded thermoplastic ply or any other molded thermoplastic reinforcement.

All other claims in Vannan 4231410 are either directly or indirectly dependent on claim 1.

Claim 2 of Vannan 4231410 is "a pneumatic tire" used with the wheel-tire assembly of claim 1 which makes the claim 1 tire typical of most tires.

Claim 3 of Vannan 4231410 further describes the claim 1 tire to have "a unitary pre-shaped plastic member molded in the shape of a tire". Vannan 10/674 989 does not claim any type of molded thermoplastic ply or other reinforcement.

Claim 4 of Vannan 4231410 states "each strand branches in junction of sidewall and tread" which is a detail of design of claim 1 and not a part of Vannan 10/674 989.

Claim 5, 6 and 7 of Vannan 4231410 are further design enhancements of the molded ply of claim 1 which are not part of Vannan 10/674 989.